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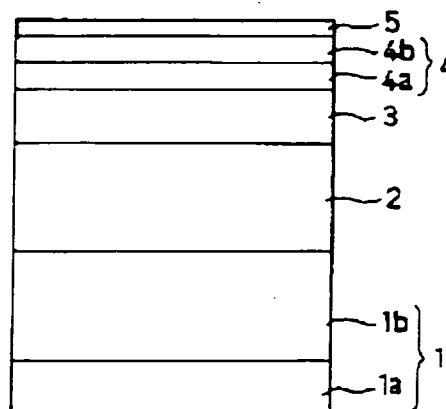
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APPLICANT : FUJI ELECTRIC CO LTD;

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INT.CL. : G11B 5/72 C23C 14/06 C23C 14/34  
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TITLE : MAGNETIC RECORDING MEDIUM AND  
ITS PRODUCTION



ABSTRACT : PURPOSE: To provide the magnetic recording medium which can deal with a slider material having high hardness, has excellent CCS durability and is capable of attaining high-density recording by formation of a carbon protective film to a small film thickness. CONSTITUTION: The hydrogen-contg. carbon protective film 4 is formed by Ar sputtering in a gaseous atmosphere for sputtering into which methane is incorporated. The carbon protective film 4 has a two-layered film structure consisting of a first carbon film 4a which is a lower layer and a second carbon film 4b which is an upper layer. The first carbon film 4a is a high-hardness film having about 25at.% hydrogen content and  $\geq 60$ GPa microhardness. The second carbon film 4b is a film having about 35at.% hydrogen content, about  $\leq 50$ GPa microhardness and resilience. The film thicknesses of the first carbon film 4a and the second carbon film 4b are respectively approximately equalled to about 100 $\text{\AA}$ .

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